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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/023,344 | 12/17/2001 | Hirokazu Miwa | 0941.66061 | 7994 |
| 7590 | 10/06/2003 | | EXAMINER | |
| Patrick G. Burns, Esq. GREER, BURNS & CRAIN, LTD. Suite 2500 300 South Wacker Dr. Chicago, IL 60606 | | | LAO, LUN YI | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2673 | |
| DATE MAILED: 10/06/2003 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/023,344 | MIWA ET AL. |
| | Examiner | Art Unit |
| | Lao Y Lun | 2673 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____ .

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) ____ is/are withdrawn from consideration.

5) Claim(s) ____ is/are allowed.

6) Claim(s) 1-12 is/are rejected.

7) Claim(s) ____ is/are objected to.

8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. ____ .

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2

4) Interview Summary (PTO-413) Paper No(s). ____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: ____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 rejected under 35 U.S.C. 102(b) as being anticipated by Karube et al(6,072,456).

Karube et al teach a liquid crystal display comprising: a display part(701) displaying an image in accordance with image data supplied through data signal lines(707); and a driving part driving said data signal lines(707) by using a plurality of driving devices(702, 11-14) together for each data signal line(707) (see figures 1-3; column 3, lines 28-42; column 4, lines 9-50 and column 5, lines 34-50).

As to claim 2, Karube et al teach a plurality of driving devices(702, 11-14) are disposed on the same side of the data signal line(see figure 1).

As to claim 3, Karube et al teach driving devices(702, 11-14) used for driving each data signal line is controlled in

accordance with a particular type of said display part (see figures 1-3).

As to claim 4, Karube et al teach wiring part provided on a substrate on which the display part is formed and driving device (702, 11-14) connected to the signal data line 707) in said wiring part (see figure 1 and column 1, lines 4-9).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Murade et al (6,377,235).

As to claims 1-4, Murade et al teach a liquid crystal display comprising: a display part displaying an image in accordance with image data supplied through data signal lines (35); and a driving part driving said data signal lines (35) by using a plurality of driving devices (111, 304, 301) together for each data signal line (35) (see figures 1-2; column 14, lines 51-60; column 15, lines 55-68 and column 16, lines 1-57).

As to claims 5-6, Murade et al teach a liquid crystal display

comprising: a display part displaying an image in accordance with image display data(V1D1-V1D6) supplied through data signal lines(35); and a driving part driving data signal lines(35) by supplying a plurality of sets of same image display data to each data signal line simultaneously(see figures 2-3 and column 16, lines 24-68 and column 17, lines 39-57).

5. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al(6,611,261).

As to claims 1-4, Zhang et al teach a liquid crystal display comprising: a display part displaying an image in accordance with image data supplied through data signal lines(22); and a driving part driving said data signal lines(22) by using a plurality of driving devices(12, BL1-BL8) together for each data signal line(22)(see figures 1-2, 8; column 9, lines 53-67 and column 10, lines 1-9).

As to claims 5-6, Zhang et al teach an LCD display comprising: a display part displaying an image in accordance with image display data(D1-D192, D193-D384) applied through data signal lines(22); and a driving part driving data signal lines(22) by supplying a plurality of sets of same image display data to each data signal line(22) simultaneously(see figures 1-2, 8; column 9, lines 53-67 and column 10, lines 1-9).

6. Claims 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki et al(6,392,628).

Yamazaki et al teach a peripheral circuit(504) supplying image display data(506) to a display part according to a given first control signal(C1, C2); a driving part(501, 502, 503, 506) supplying the first control signal(C1, C2) and the image display data(506) to the peripheral circuit(504); a level converting part built(LS) in said driving part, and performing level conversion of a given second control signal so as to generate the first control signal(C1,C2) (see figures 3-6; 21, 22; column 2, lines 12-15 and column 19, lines 17-34).

As to claim 8, Yamazaki et al teach display part and the peripheral circuit are formed integrally on a same substrate(see figures 3, 18 and column 1, lines 27-33).

As to claims 9-12, Yamazaki et al teach a driving part(501, 502, 503, 506) having a dividing part(502) and a selecting part(NAND1, NAND2 and invertors(see figure 5).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kuwabara et al teach a driving method for applying the same video signal into the video signal lines(31) belonging to the same group.

8. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lun-yi, Lao whose telephone number is (703) 305-4873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

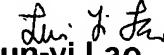
or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

September 30, 2003


Lun-yi Lao
Primary Examiner